IN THE UNITED STATES DISTRICT COURT WESTERN DISTRICT OF NORTH CAROLINA CHARLOTTE DIVISION

SEMAFONE LIMITED and SEMAFONE, INC.,)
Plaintiffs,) Civil Action No.
V.	JURY TRIAL DEMANDED
PCI PAL (U.S.) INC.,	ý
Defendant.))

COMPLAINT FOR PATENT INFRINGEMENT

Semafone Limited and Semafone, Inc. (collectively, "Semafone"), brings this complaint for patent infringement against PCI Pal (U.S.) Inc. ("PCI Pal") and alleges as follows:

THE PARTIES

- 1. Semafone Limited is a company incorporated and registered in England and Wales, with a principal place of business in Guildford, Surrey in the United Kingdom.
- 2. Semafone, Inc. is a Delaware corporation with a principal place of business in Boston, Massachusetts and a fully owned subsidiary of Semafone Limited. Semafone, Inc. is responsible for Semafone operations in the United States and practices the Semafone technologies discussed below with the full authorization of Semafone Limited.
- 3. Upon information and belief, PCI Pal is a Nevada corporation with a principal place of business in Charlotte, North Carolina.

JURISDICTION AND VENUE

4. This case arises under the patent laws of the United States, 35 U.S.C. § 1 et seq.

- 5. This Court has subject matter jurisdiction over this case pursuant to 28 U.S.C. §§ 1331 and 1338 in that Semafone seeks, *inter alia*, relief for PCI Pal's infringement of the Semafone Patents discussed below.
- 6. PCI Pal is subject to personal jurisdiction in this District because PCI Pal maintains a principal place of business in North Carolina and in this District. Further, upon information and belief, PCI Pal purposefully directs its activities toward this forum. PCI Pal conducts, and has conducted, continuous, systematic, substantial, and routine business within North Carolina including, but not limited to, marketing, advertising, offering products and services for sale, and selling products and services in North Carolina.
- 7. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391 and 1400 because PCI Pal maintains and has maintained a regular and established place of business in this District.
- 8. Further, PCI Pal has committed acts of patent infringement giving rise to this action within the State of North Carolina and this District.

FACTUAL ALLEGATIONS

PLAINTIFF SEMAFONE AND ITS INNOVATIVE TECHNOLOGY A.

9. With consumers' lives increasingly moving into the digital and online spheres, businesses have gone through a transformation in how to offer products and services through remote ordering and account management. Accordingly, businesses have more recently expanded their use of call centers, and call center agents, to take orders, process payments and manage customer accounts. Call centers can be accessed through traditional telephones, internet-based telephony, web-based applications and other means. As use of call centers has expanded, so has the need for businesses to ensure that their consumers' personal and confidential information be protected from improper disclosure.

- 10. In addition, businesses found themselves facing further global, national and local compliance standards governing the handling of, and/or access to, private and confidential consumer information. Businesses looked for new technology and solutions to address their evergrowing access to more personal and confidential information while ensuring compliance with stringent standards and simply protecting customers' most sensitive information.
- 11. Semafone, founded in 2009, recognized this need for secure payment transactions and business' desires to shield themselves from handling personal and confidential information. Since that time, Semafone emerged as a global leader in secure transaction technologies, offering businesses multiple solutions for protecting sensitive customer information, such as payment card data.
- 12. One of Semafone's solutions allows businesses to protect their customers' credit card or debit card data during telephone payment transactions, while maintaining compliance with any Payment Card Industry Data Security Standard (PCI-DSS) obligations. A description can be found at https://semafone.com/semafone-solutions/cardprotect/voice-plus/, including the embedded video displaying an exemplary use.
- 13. As discussed below, Semafone developed its technologies and patented its solutions using dual-tone multi-frequency (DTMF) masking technology which protects consumer's credit card or debit card data by shielding it from call center agents.
- 14. Semafone's technologies enables its customers to process secure and compliant payments across the customers' various engagement channels, including telephone, internet and other channels. Semafone's technologies work in any environment, including the public switched telephone network (PSTN), Voice over Internet Protocol (VoIP) telephony systems, cloud systems and others.

- 15. Semafone's technologies are compliant with global payment security standards, such as PCI-DSS and others.
- 16. Semafone's customers include some of the world's most recognizable brands in the United States and around the world. Semafone also integrates its technology with some of the world's leading network and telecommunications specialists and call center entities.

B. SEMAFONE'S ASSERTED PATENTS

- 17. Semafone's development of solutions for protecting sensitive data has resulted in, *inter alia*, the issuance of U.S. Patent Nos. 8,750,471 (the "471 patent"), 9,858,573 (the "573 patent"), 10,402,826 (the "826 patent") and 11,049,108 (the "108 patent"), each titled "Signal Detection and Blocking for Voice Processing Equipment" (collectively, the "Semafone Patents"). Copies of the each of the Semafone Patents are attached hereto as Exhibits A D, respectively.
- 18. The inventors of the Semafone Patents recognized the need for improved systems and methods for allowing secure communication across a telephone system to allow for the protection of personal and/or financial data when payment information is communicated or otherwise transmitted via telephone or the like.
- 19. Figure 2 of each of the Semafone Patents shows an exemplary telephone processing system according to the invention:

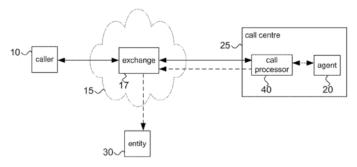
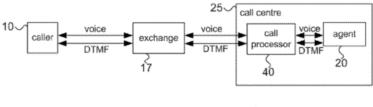


Figure 2

- 20. As discussed in each of the Semafone Patents, in an exemplary embodiment, a caller 10 communicates via a telephone network 15 (comprising one or more telephone exchanges 17) with an agent 20 in a call center 25. The telephone call from the caller 10 to the agent 20 is routed via a telephone call processor 40, located in the call center 25. Call processor 40 is an intermediary for all such calls between caller 10 and agent 20 and is arranged such that the agent 20 has no means by which to circumvent the call processor 40 and interact with the caller 10 directly. Call Processor 40 acts to modify characteristics of the telephone call or signal from the caller 10 to the agent 20 and to route data to the entity 30, such that sensitive information from the caller 10 is barred from reaching the agent 20 while allowing agent 20 to assist caller 10 in facilitating the interaction with entity 30.
- 21. In the embodiment above, call processor 40 is located in the call center 25, however, alternative embodiments may be envisaged by those skilled in the art. For example, call processor 40 may be located at a site within the telephone network 15 external to the call center 25, and exchange 17 configured such that calls from the caller 10 to the call center 25 are routed via call processor 40. By such means, call processing could be offered by a service provider as a service to the call center 25. In a further alternative, call processor 40 is located at the location of the caller 10, as a part of, or in addition to, the telephony equipment of caller 10.
- 22. Thus, it can be seen that the call processor **40** could be placed at any point along the telephony network between caller **10** and agent **20**, and also be made compatible with any traditional telephony network, including SIP (Session Initiation Protocol) and VoIP (Voice over IP) telephone systems.

- 23. Among other things, the Semafone Patents disclose and claim systems and methods for processing telephone calls in which the telephone call comprises both voice signals and data signals.
- 24. One exemplary embodiment disclosed in the Semafone Patents includes operating in a first mode, whereby both the voice and data signals are transmitted from a first interface to a second interface. An exemplary representation of the first mode is shown in Figure 4 of the Semafone Patents:



"normal" mode

Figure 4

25. The exemplary embodiment includes operating in a second mode, whereby voice and related signaling information is received at the first interface and optionally transmitting this information to the second interface, but blocking the data signals from being transmitted to the second interface. An exemplary representation of the second mode is shown in Figure 5 of the Semafone Patents:

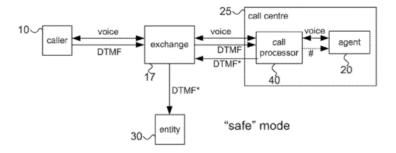


Figure 5

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- In the exemplary embodiment, the call processing method then associates an 26. identifier with first and second signal information in order to generate a request to an external entity, e.g., to request payment authorization from a third party payment service provider such as a credit card issuer.
- 27. In the exemplary embodiment, upon receipt of a return message from the third party identifying either the success or failure of the request, the message will be matched with the identifier and processes the first and second information signals in dependence on the success or failure of the request.
 - 28. The '471 patent issued with 39 claims. Independent claim 1 is reproduced below:
 - 1. A telephone call processor for processing telephone calls comprising voice signals and data signals, the call processor comprising a first telephone interface, a second telephone interface, and a data interface, the call processor being operable in a first mode and in a second mode, wherein:

in the first mode, the call processor is adapted to receive voice signals and data signals at the first telephone interface and to transmit voice signals and data signals to the second telephone interface; and

in the second mode, the call processor is adapted to

receive voice signals and data signals at the first telephone interface,

to block data signals from being transmitted to the second telephone interface.

to transmit voice signals to the second telephone interface and to extract data from the data signals received at the first and/or second telephone interfaces, and

to transmit data signals to and to receive data signals from an external entity via the data interface in dependence on the extracted data and on data signals received at the first and/or second telephone interfaces.

29. The '573 Patent issued with 29 claims. Independent claim 24 is reproduced below: 24. An apparatus for processing a telephone call placed to a call centre, the apparatus comprising

a telephone call processor located external to the call centre and adapted to receive via a first interface a telephone call comprising voice signals and data signals,

the telephone call processor being further adapted:

to generate an identifier for the telephone call;

to receive information signals encoded in the data signals;

to associate the identifier with the information signals;

to generate a request based on the information signals;

to transmit via a data interface the request to an external entity;

to receive via the data interface a message from the entity to identify success or failure of the request;

to match the received message to the telephone call in dependence on the identifier; and

to process the information signals in dependence on the success or failure of the request.

- 30. The '826 patent issued with 18 claims covering differing aspects of Semafone's technology. Independent claim 11 is reproduced below:
 - 11. A method performed at a call processor of processing telephone calls comprising voice signals and data signals, the method comprising:

in a first mode, receiving voice signals and data signals at a first telephone interface and transmitting voice signals and data signals to a second telephone interface; and

in a second mode;

receiving voice signals and first information signals encoded in data signals at a first telephone interface;

blocking data signals from being transmitted to a second telephone interface and optionally to transmit voice signals to the second telephone interface;

receiving second information signals via a second interface;

associating an identifier with the first and second information signals;

generating a request based on the first and second information signals;

transmitting via a data interface the request to an external entity;

receiving via the data interface a message from the entity to identify success or failure of the request:

matching the received message to the telephone call in dependence on the identifier; and

processing the first and second information signals in dependence on the success or failure of the request.

- The '108 patent issued with 21 claims additional aspects of Semafone's solutions. 31. Independent claim 10 is reproduced below:
 - 10. A method of processing sensitive information, the sensitive information provided by a caller via a call processor assisted by an agent, the method comprising:

receiving data signals comprising sensitive information from the call processor;

extracting the sensitive information from the data signals;

transmitting the sensitive information to an application server adapted to conduct a transaction with an external entity using the sensitive information; and

indicating to the agent that the sensitive information has been received and/or transmitted without revealing the sensitive information to the agent.

These claimed features, among other claims in the Semafone Patents, make it 32. possible for a business to provide a call center for its consumers to transact business using confidential and sensitive information, such as credit card information, without the call center's agent ever having access to the consumer's confidential and sensitive information.

- 33. The Semafone Patents disclose and teach multiple benefits, including, allowing a call center agent to speak with a customer in both a "normal mode" and a "safe mode" whereby such modes allow for complete financial transactions without exposing the call center agent (or the call center) to the customer's personal and confidential information while processing the transaction. The Semafone Patents further discloses how to block the personal and confidential information from reaching the call center agent and how to securely transmit the necessary payment information to a third-party payment service provider and to finally use the approval/rejection from the payment service provider to process the transaction.
- 34. The Semafone Patents also recite limitations directed to employing unconventional technological solutions to these technological problems encountered by the prior art.

C. THE ACCUSED INSTRUMENTALITY

35. PCI Pal sells and offers for sale in the United States secure payment solutions, including, but not limited to, products and methods PCI Pal has sold or performed under the name "Agent Assist" and related technologies and methods (collectively, the "Accused Instrumentality").

36. As described on PCI Pal's website:

Our core solution, Agent Assist, utilizes DTMF (Dual Tone Multi Frequency) masking technology, as well as Speech Recognition for customers who can't use their telephone keypad, to provide companies with a secure way of handling payments by phone without bringing their environments in scope of Payment Card Industry Data Security Standard (PCI DSS).

We integrate with the call flow and at the point of payment, intercept any keypad tones or speech from the customer. This way the agent doesn't hear or see the card data, all they see are asterisks on the screen. The customer and the agent can still converse throughout the process, but the sensitive card data, the PAN and the CSV, are prevented from reaching the agent or your environment, drastically reducing the scope of PCI compliance. This solution is available globally from within the PCI Pal platform that provides our IVR and Digital secure payment products, so your agents can have access to take payments from customers through any channel.

See Exhibit E (https://www.pcipal.com/en-us/pci-compliance-solutions/agent-assist/).

37. The Accused Instrumentality also facilitates the processing of payments with an external payment provider:

PAYMENT IS PROCESSED BY YOUR PAYMENT PROVIDER

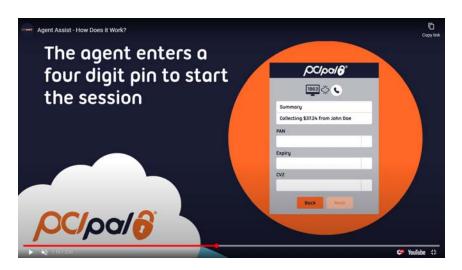
The agent hits the "process card" button, which instructs PCI Pal to send the transaction to the payment provider. No cardholder data enters your environment, so from a PCI DSS perspective, your area of scope is vastly reduced.

See Exhibit E.

- 38. PCI Pal's website, also includes an embedded video demonstrating the Accused Instrumentalities. Exhibit F (screenshots from video at https://www.pcipal.com/en-us/pci-compliance-solutions/agent-assist/).
- 39. As shown in the screen shot below from that video, the Accused Instrumentality allows certain voice and data signals to reach the call center agent during portions of a call:



40. If a payment is requested during a call, the call center agent initiates a payment session during which the customer's credit card data is inputted, but masked from the call center agent:





41. During the payment session, the customer enters card details:





42. The card details are intercepted by the Accused Instrumentality:



43. During the payment session, the Accused Instrumentality blocks the portion of telephone call's information containing credit card information from the call center. Card and transaction details are sent to a payment service provider.

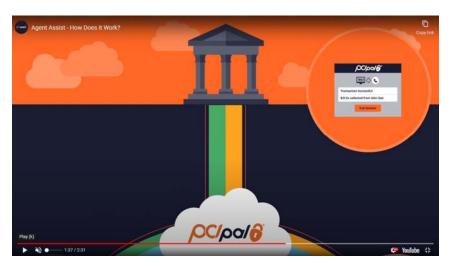




44. Credit card information is blocked from the call center agent and appears as asterisked, or otherwise masked data on the call center agent's device as implemented by the Accused Instrumentality. The Accused Instrumentality indicates to the agent that sensitive information has been received and/or transmitted without revealing the sensitive information:







45. The agent, however, continues to receive certain voice signals throughout the call.



46. The success or failure of the payment request is determined and indicated to the agent.



47. PCI Pal provides services, software, databases, instructions and documentation relating to the Accused Instrumentality to third party partners, resellers and/or customers to encourage these third parties to practice the Semafone Patents. By way of example, PCI Pal maintains a "Partner Program" that encourages partners to integrate, deploy and use the Accused Instrumentality to, among other things, solve customer challenges and achieve compliance:

By dedicating ourselves to the focused pursuit of easy to integrate and simple to deploy technology, we provide the most compelling value proposition for our partners to solve their customers' challenges in achieving compliance and safeguarding reputations. Our Partner Program

caters to many organizations looking to capitalize on the growing demands of businesses for proven and robust PCI compliance solutions. By becoming a partner of PCI Pal you are automatically enrolled into our Partner Program giving you access to many resources and benefits. Through robust sales and product training, exceptional marketing and sales tools, and reliable commercial and technical support, you are fully enabled to deliver proven PCI compliance solutions to your customers.

https://www.pcipal.com/en-us/why-us/partners-integrations/. See Exhibit G.

COUNT I (Infringement of Semafone's '471 Patent)

- 48. Semafone repeats and re-alleges the allegations set forth in the foregoing paragraphs of this Complaint as if fully set forth herein.
- 49. Semafone is the owner of the entire right, title, and interest in and to the '471 patent, which was duly and legally issued by the United States Patent and Trademark Office to Andrew Peter William Tew, David Jackson, Timothy Critchley and Richard Charles Cooper-Driver.
 - 50. The claims of the '471 patent are valid and enforceable.
- 51. PCI Pal, without authority, has made, used, offered to sell, sold, and/or imported into the United States the Accused Instrumentality.
- 52. The Accused Instrumentality incorporates or makes use of and Semafone makes use of the inventions covered by the '471 patent, thereby infringing, literally and/or under the doctrine of equivalents, one or more claims of the '471 patent. Hence, PCI Pal directly infringes, has directly infringed, and continues to directly infringe one or more claims of the '471 patent. PCI Pal will continue to infringe the '471 patent unless enjoined by this Court.
- 53. By way of example only, and with reference to claim 1 of the '471 patent, the Accused Instrumentality includes a telephone call processor for processing telephone calls comprising voice signals and data signals, the call processor comprising a first telephone interface,

a second telephone interface, and a data interface, the call processor being operable in a first mode and in a second mode.

- 54. In the first mode, the call processor of the Accused Instrumentality is adapted to receive voice signals and data signals at the first telephone interface.
- 55. The call processor of the Accused Instrumentality operates a second mode. In the second mode, the call processor is adapted to:
 - a. receive voice signals and data signals at the first telephone interface,
 - to block data signals from being transmitted to the second telephone interface,
 - to transmit voice signals to the second telephone interface and to extract data from the data signals received at the first and/or second telephone interfaces,
 and
 - d. to transmit data signals to and to receive data signals from an external entity via the data interface in dependence on the extracted data and on data signals received at the first and/or second telephone interfaces.
- 56. As early as the date of this Complaint, if not beforehand, PCI Pal has and/or has had knowledge of, or should have known of, the '471 patent and PCI Pal's infringement.
- 57. Upon information and belief, PCI Pal has willfully infringed, willfully infringes, and/or will willfully infringe, the '471 patent by acting with knowledge that its actions constituted infringement of the '471 patent. Despite this knowledge, PCI Pal has continued to make, use, offer to sell, sell, and/or import the Accused Instrumentality.
- 58. On information and belief, PCI Pal, with knowledge of and/or with willful blindness to the '471 patent, has also induced, and/or induces, infringement of the '471 patent with specific

Instrumentality and infringing uses thereof. PCI Pal has done so by, among other things, providing, and instructing and encouraging third parties – including, among others, partners, resellers and/or customers – to operate and use the Accused Instrumentality in an infringing manner with knowledge that these actions would infringe. PCI Pal's acts of inducement include, among other means, the provision of the Accused Instrumentality, along with instructions, services, training and documentation.

- 59. On information and belief, PCI Pal, with knowledge of and/or with willful blindness to the '471 patent, has also contributed to, and/or contributes to, infringement by third parties including, among others, partners, resellers and/or customers by selling, offering to sell or importing the Accused Instrumentality as a component of a patented apparatus, or for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of the '471 patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.
- 60. PCI Pal's intentional infringement has been, and/or is, egregious. PCI Pal is liable for willful infringement and Semafone is entitled to enhanced damages under 35 U.S.C. § 284.
- 61. As a direct result of PCI Pal's infringement of the '471 patent, Semafone has been, is being, and will continue to be, seriously damaged and irreparably harmed unless PCI Pal is enjoined by this Court from the actions complained of herein, and thus Semafone is without an adequate remedy at law.
- 62. Semafone is entitled to recover from PCI Pal the damages sustained by Semafone as a result of PCI Pal's wrongful acts in an amount subject to proof at trial.

COUNT II

(INFRINGEMENT OF SEMAFONE'S '573 PATENT)

- 63. Semafone repeats and re-alleges the allegations set forth in the foregoing paragraphs of this Complaint as if fully set forth herein.
- 64. Semafone is the owner of the entire right, title, and interest in and to the '573 patent, which was duly and legally issued by the United States Patent and Trademark Office to Andrew Peter William Tew, David Jackson, Timothy Critchley and Richard Charles Cooper-Driver.
 - 65. The claims of the '573 patent are valid and enforceable.
- 66. PCI Pal, without authority, has made, used, offered to sell, sold, and/or imported into the United States the Accused Instrumentality.
- 67. The Accused Instrumentality incorporates or makes use of and Semafone makes use of the inventions covered by the '573 patent, thereby infringing, literally and/or under the doctrine of equivalents, one or more claims of the '573 patent. Hence, PCI Pal directly infringes, has directly infringed, and continues to directly infringe one or more claims of the '573 patent. PCI Pal will continue to infringe the '573 patent unless enjoined by this Court.
- 68. By way of example only, and with reference to claim 24 of the '573 patent, the Accused Instrumentality includes an apparatus for processing a telephone call placed to a call centre.
- 69. The apparatus comprises a telephone call processor located external to the call centre, where the apparatus is adapted to receive via a first interface a telephone call comprising voice signals and data signals.
 - 70. The telephone call processor is further adapted:
 - a. to generate an identifier for the telephone call;
 - b. to receive information signals encoded in the data signals;

- c. to associate the identifier with the information signals;
- d. to generate a request based on the information signals;
- e. to transmit via a data interface the request to an external entity;
- f. to receive via the data interface a message from the entity to identify success or failure of the request;
- g. to match the received message to the telephone call in dependence on the identifier; and
- to process the information signals in dependence on the success or failure of the request.
- 71. As early as the date of this Complaint, if not beforehand, PCI Pal has and/or has had knowledge of, or should have known of, the '573 patent and PCI Pal's infringement.
- 72. Upon information and belief, PCI Pal has willfully infringed, willfully infringes, and/or will willfully infringe, the '573 patent by acting with knowledge that its actions constituted infringement of the '573 patent. Despite this knowledge, PCI Pal has continued to make, use, offer to sell, sell, and/or import the Accused Instrumentality.
- 73. On information and belief, PCI Pal, with knowledge of and/or with willful blindness to the '573 patent, has also induced, and/or induces, infringement of the '573 patent with specific intent to do so by its activities relating to the marketing, distribution, and/or sale of the Accused Instrumentality and infringing uses thereof. PCI Pal has done so by, among other things, providing, and instructing and encouraging third parties including, among others, partners, resellers and/or customers to operate and use the Accused Instrumentality in an infringing manner with knowledge that these actions would infringe. PCI Pal's acts of inducement include, among other

means, the provision of the Accused Instrumentality, along with instructions, services, training and documentation.

- On information and belief, PCI Pal, with knowledge of and/or with willful blindness to the '573 patent, has also contributed to, and/or contributes to, infringement by third parties including, among others, partners, resellers and/or customers by selling, offering to sell or importing the Accused Instrumentality as a component of a patented apparatus, or for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of the '573 patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.PCI Pal's intentional infringement is egregious.
- 75. PCI Pal's intentional infringement has been, and/or is, egregious. PCI Pal is liable for willful infringement and Semafone is entitled to enhanced damages under 35 U.S.C. § 284.
- 76. As a direct result of PCI Pal's infringement of the '573 patent, Semafone has been, is being, and will continue to be, seriously damaged and irreparably harmed unless PCI Pal is enjoined by this Court from the actions complained of herein, and thus Semafone is without an adequate remedy at law.
- 77. Semafone is entitled to recover from PCI Pal the damages sustained by Semafone as a result of PCI Pal's wrongful acts in an amount subject to proof at trial.

<u>COUNT III</u> (INFRINGEMENT OF SEMAFONE'S '826 PATENT)

- 78. Semafone repeats and re-alleges the allegations set forth in the foregoing paragraphs of this Complaint as if fully set forth herein.
- 79. Semafone is the owner of the entire right, title, and interest in and to United States Patent No. 10,402,826 ("the '826 patent"), which was duly and legally issued by the United States

Patent and Trademark Office to Andrew Peter William Tew, David Jackson, Timothy Critchley and Richard Charles Cooper-Driver.

- 80. The claims of the '826 patent are valid and enforceable.
- 81. PCI Pal, without authority, has made, used, offered to sell, sold, and/or imported into the United States the Accused Instrumentality.
- 82. The Accused Instrumentality incorporates or makes use of and Semafone makes use of the inventions covered by the '826 patent, thereby infringing, literally and/or under the doctrine of equivalents, one or more claims of the '826 patent. Hence, PCI Pal directly infringes, has directly infringed, and continues to directly infringe one or more claims of the '826 patent. PCI Pal will continue to infringe the '826 patent unless enjoined by this Court.
- 83. By way of example only, and with reference to claim 11 of the '826 patent, PCI Pal, in relation to uses of the Accused Instrumentality, without authority, has performed, performs and will continue to perform a method performed at a call processor of processing telephone calls comprising voice signals and data signals.
- 84. PCI Pal performs the step of in a first mode, receiving voice signals and data signals at a first telephone interface and transmitting voice signals and data signals to a second telephone interface.
 - 85. PCI Pal performs the steps of in a second mode;
 - a) receiving voice signals and first information signals encoded in data signals at a first telephone interface;
 - b) blocking data signals from being transmitted to a second telephone interface and optionally to transmit voice signals to the second telephone interface;
 - c) receiving second information signals via a second interface;

- d) associating an identifier with the first and second information signals;
- e) generating a request based on the first and second information signals;
- f) transmitting via a data interface the request to an external entity;
- g) receiving via the data interface a message from the entity to identify success or failure of the request;
- h) matching the received message to the telephone call in dependence on the identifier; and
- processing the first and second information signals in dependence on the success or failure of the request.
- 86. As early as the date of this Complaint, if not beforehand, PCI Pal has and/or has had knowledge of, or should have known of, the '826 patent and PCI Pal's infringement.
- 87. Upon information and belief, PCI Pal has willfully infringed, willfully infringes, and/or will willfully infringe, the '826 patent by acting with knowledge that its actions constituted infringement of the '826 patent. Despite this knowledge, PCI Pal has continued to make, use, offer to sell, sell, and/or import the Accused Instrumentality.
- 88. On information and belief, PCI Pal, with knowledge of and/or with willful blindness to the '826 patent, has also induced, and/or induces, infringement of the '826 patent with specific intent to do so by its activities relating to the marketing, distribution, and/or sale of the Accused Instrumentality and infringing uses thereof. PCI Pal has done so by, among other things, providing, and instructing and encouraging third parties including, among others, partners, resellers and/or customers to operate and use the Accused Instrumentality in an infringing manner with knowledge that these actions would infringe. PCI Pal's acts of inducement include, among other

means, the provision of the Accused Instrumentality, along with instructions, services, training and documentation.

- 89. On information and belief, PCI Pal, with knowledge of and/or with willful blindness to the '826 patent, has also contributed to, and/or contributes to, infringement by third parties including, among others, partners, resellers and/or customers by selling, offering to sell or importing the Accused Instrumentality as a component of a patented apparatus, or for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of the '826 patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.
- 90. PCI Pal's intentional infringement has been, and/or is, egregious. PCI Pal is liable for willful infringement and Semafone is entitled to enhanced damages under 35 U.S.C. § 284.
- 91. As a direct result of PCI Pal's infringement of the '826 patent, Semafone has been, is being, and will continue to be, seriously damaged and irreparably harmed unless PCI Pal is enjoined by this Court from the actions complained of herein, and thus Semafone is without an adequate remedy at law.
- 92. Semafone is entitled to recover from PCI Pal the damages sustained by Semafone as a result of PCI Pal's wrongful acts in an amount subject to proof at trial.

COUNT IV(INFRINGEMENT OF SEMAFONE'S '108 PATENT)

- 93. Semafone repeats and re-alleges the allegations set forth in the foregoing paragraphs of this Complaint as if fully set forth herein.
- 94. Semafone is the owner of the entire right, title, and interest in and to the '108 patent, which was duly and legally issued by the United States Patent and Trademark Office to Andrew Peter William Tew, David Jackson, Timothy Critchley and Richard Charles Cooper-Driver.

- 95. The claims of the '108 patent are valid and enforceable.
- 96. PCI Pal, without authority, has made, used, offered to sell, sold, and/or imported into the United States the Accused Instrumentality.
- 97. The Accused Instrumentality incorporates or makes use of and Semafone makes use of the inventions covered by the '108 patent, thereby infringing, literally and/or under the doctrine of equivalents, one or more claims of the '108 patent. Hence, PCI Pal directly infringes, has directly infringed, and continues to directly infringe one or more claims of the '108 patent. PCI Pal will continue to infringe the '108 patent unless enjoined by this Court.
- 98. By way of example only, and with reference to claim 10 of the '108 patent, PCI Pal, in relation to uses of the Accused Instrumentality, without authority, has performed, performs and will continue to perform a method of processing sensitive information, the sensitive information provided by a caller via a call processor assisted by an agent.
- 99. PCI Pal performs the step of receiving data signals comprising sensitive information from the call processor.
- 100. PCI Pal performs the step of extracting the sensitive information from the data signals.
- 101. PCI Pal performs the step of transmitting the sensitive information to an application server adapted to conduct a transaction with an external entity using the sensitive information.
- 102. PCI Pal performs the step of indicating to the agent that the sensitive information has been received and/or transmitted without revealing the sensitive information to the agent.
- 103. As early as the date of this Complaint, if not beforehand, PCI Pal has and/or has had knowledge of, or should have known of, the '108 patent and PCI Pal's infringement.

104. Upon information and belief, PCI Pal has willfully infringed, willfully infringes, and/or will willfully infringe, the '108 patent by acting with knowledge that its actions constituted infringement of the '108 patent. Despite this knowledge, PCI Pal has continued to make, use, offer to sell, sell, and/or import the Accused Instrumentality.

105. On information and belief, PCI Pal, with knowledge of and/or with willful blindness to the '108 patent, has also induced, and/or induces, infringement of the '108 patent with specific intent to do so by its activities relating to the marketing, distribution, and/or sale of the Accused Instrumentality and infringing uses thereof. PCI Pal has done so by, among other things, providing, and instructing and encouraging third parties – including, among others, partners, resellers and/or customers – to operate and use the Accused Instrumentality in an infringing manner with knowledge that these actions would infringe. PCI Pal's acts of inducement include, among other means, the provision of the Accused Instrumentality, along with instructions, services, training and documentation.

106. On information and belief, PCI Pal, with knowledge of and/or with willful blindness to the '108 patent, has also contributed to, and/or contributes to, infringement by third parties – including, among others, partners, resellers and/or customers – by selling, offering to sell or importing the Accused Instrumentality as a component of a patented apparatus, or for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of the '108 patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

107. PCI Pal's intentional infringement has been, and/or is, egregious. PCI Pal is liable for willful infringement and Semafone is entitled to enhanced damages under 35 U.S.C. § 284.

- 108. As a direct result of PCI Pal's infringement of the '108 patent, Semafone has been, is being, and will continue to be, seriously damaged and irreparably harmed unless PCI Pal is enjoined by this Court from the actions complained of herein, and thus Semafone is without an adequate remedy at law.
- 109. Semafone is entitled to recover from PCI Pal the damages sustained by Semafone as a result of PCI Pal's wrongful acts in an amount subject to proof at trial.

PRAYER FOR RELIEF

WHEREFORE, Semafone prays for judgment and relief as follows:

- A. an adjudication that PCI Pal has infringed the Semafone Patents;
- B. a finding that PCI Pal's infringement has been, is, and continues to be willful;
- C. an award of damages adequate to compensate Semafone for PCI Pal's past infringement, and any continuing or future infringement, including prejudgment and post-judgment interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
 - D. an award of enhanced damages;
- E. a finding that this case is "exceptional" under 35 U.S.C. § 285 and awarding Semafone its expenses and attorneys' fees incurred in bringing and prosecuting this action;
- F. an order permanently enjoining PCI Pal, its officers, agents, servants, employees, contractors and attorneys, and all those in active concert and participation with the foregoing persons and entities from further infringement of the Semafone Patents, and,
- G. an award to Semafone of such further relief at law or in equity as the Court deems just and proper, including, but not limited to costs, fees, expenses, and/or interest.
 - H. Grant Semafone such other relief as it deems just and proper.

JURY DEMAND

Semafone requests a jury trial for those issues so triable herein.

This the 15th day of September, 2021.

s/ Michael G. Adams

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